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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,009	12/06/2004	Makoto Sakagami	Q85151	1293
23373	7590	09/08/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			MORGAN, EILEEN P	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/517,009

Applicant(s)

SAKAGAMI ET AL.

Examiner

Eileen P. Morgan

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-6-04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because it is unclear what a 'chopping' operation is. The 'chopping dedicated axis' is not clear, nor is the meaning of a 'contour control' understood. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: the entire specification is unclear. It is not understood what the 'chopping operation' is, what a 'chopping dedicated axis' is, or a contour control.

Appropriate correction is required.

### **Claim Rejections - 35 USC § 112**

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims are totally unclear in view of the unclear specification. The preamble of the claims are not clear in what exactly is being claimed. "A numerical control apparatus" for what? What is the control apparatus controlling? A grinding machine? What is the workpiece? Is this a process claim of 'making the contour'? What is a contour control? This lacks antecedent basis. What is controlling two or more control axes? The NC or the contour control? What are the axes controlling? What 'comprises' chopping movement? What is chopping movement? What is the movement data? Data of what? What is 'the chopping operation'? This lacks antecedent basis. Is this a grinding operation? 'At the same time' refers to what? This claim is totally unclear. The rest of the claims are equally unclear. Cl. 2 has similar problems as claim

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1. Cl. 3, what does 'making the contour control' refer to? What does 'in such a manner' mean? How is the data 'convoluted'? The last four lines make no sense at all. Ultimately, 'the contour control' makes the 'contour control'. How and what 'distributes the data'? Cl. 4, what is a zero delay? How is it corrected? 'each control axis' should be 'axes'. How is the chopping operation made at the same time as the contour control? Cl. 5, has similar problems. In addition these claims are apparatus claims but are actually reciting method steps, such as /making', 'comparing', 'synthesizing', 'distributing', etc. How is the position determined and feedback? How is this information synthesized? Distributed? What is a chopping interpolation vector? Contour control interpolation vector? Cl. 6 is totally unclear. What is a processing program? What is a ladder portion? Cl. 7 is also unclear. What parameters are being claimed?

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are totally unclear in view of the unclear specification. The preamble of the claims are not clear in what exactly is being claimed. "A numerical control apparatus" for what? What is the control apparatus controlling? A grinding machine? What is the workpiece? Is this a process claim of 'making the contour'? What is a contour control? This lacks antecedent basis. What is controlling two or more control axes? The NC or the contour control? What are the axes controlling? What 'comprises' chopping movement? What is chopping movement? What is the movement data? Data of what? What is 'the chopping operation'? This lacks antecedent basis.

Is this a grinding operation? 'At the same time' refers to what? This claim is totally unclear. The rest of the claims are equally unclear. Cl. 2 has similar problems as claim

1. Cl. 3, what does 'making the contour control' refer to? What does 'in such a manner' mean? How is the data 'convoluted'? The last four lines make no sense at all. Ultimately, 'the contour control' makes the 'contour control'. How and what 'distributes the data'? Cl. 4, what is a zero delay? How is it corrected? 'each control axis' should be 'axes'. How is the chopping operation made at the same time as the contour control? Cl. 5, has similar problems. In addition these claims are apparatus claims but are actually reciting method steps, such as /making', 'comparing', 'synthesizing', 'distributing', etc. How is the position determined and feedback? How is this information synthesized? Distributed? What is a chopping interpolation vector? Contour control interpolation vector? Cl. 6 is totally unclear. What is a processing program? What is a ladder portion? Cl. 7 is also unclear. What parameters are being claimed?

### Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-7, as best understood, are rejected under 35 U.S.C. 102(b) as being by anticipated by Masuda et al.-6,591,148.

Masuda discloses a NCdevice for a grinding machine having reciprocating (chopping) movement (col. 1, lines 50-67), with a correcting means for stopping movement at a predetermined point (see claims).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P. Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Monday-Thursday (Office), Friday (Work at home).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EILEEN P. MORGAN  
PRIMARY EXAMINER